

Operating Permit Application Packet for

New Class III Sources Revision of Class III Operating Permit Renewal of Class III Operating Permit



*Prepared by
Division of Environmental Protection
Bureau of Air Pollution Control
Class II Permitting Branch
May 2003*

Class III Eligibility:

A source which meets the following criteria may obtain a Class III operating permit:

The source:

1. Emits or has the potential to emit individually or in combination, a total of 5 tons or less per year of PM₁₀, NO_x, SO₂, VOC, and H₂S;
2. Emits less than 1,000 pounds of lead (Pb) per year;
3. Does not seek an emissions limitation to avoid the requirements of 40 CFR Part 63 (National Emissions Standards for Hazardous Air Pollutants for Source Categories - MACT);
4. Is not subject to the requirements of Title V (major source);
5. Is not subject to the requirement of 40 CFR Part 60 (New Source Performance Standards - NSPS);
6. Is not subject to the requirements of 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants - NESHAPS);
7. Is not a temporary source, as defined in NAC 445B.194;
8. Is not required to obtain an operating permit to comply solely with the requirements of NAC 445B.22037 for surface area disturbance; and
9. Is not located at or part of another stationary source.

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-General Company Information Form (2 Pages)

Additional Forms

Emission Units Application Forms	Appendix 1
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-Industrial Process Application Form (4 Pages)

-Combustion Equipment Application Form (4 Pages)

-Storage Silo Application Form (5 Pages)

-Liquid Storage Tank Application Form (3 Pages)

-Surface Area Disturbance Application Form (1 Page)

Insignificant Activity Unit Information Form	Appendix 2
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-Insignificant Activity Information Form (1 Page)

Facility-Wide Potential to Emit Tables	Appendix 3
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-Table 1 - Facility-Wide (Stationary Source) Potential to Emit (1 Page)

-Table 2 - Insignificant Activities Potential to Emit (1 Page)

Detailed Emissions Calculations	Appendix 4
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-This space made available for applicant to provide emissions calculations.

Narrative Description - Process Flow Diagram - Plot Plan - Map -	
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Dust Control Plan..... Appendix 5

-This space made available for applicant to provide a narrative description of the entire process, process flow diagram, plot plan, map, and dust control plan if applicable.

Application Certification	Appendix 6
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-Application Checklist and Certification

ATTACHMENTS

List of Approved Insignificant Activities	Attachment 1
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NAC 445B.288.....	Attachment 2
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List of Trivial Activities	Attachment 3
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List of Hazardous Air Pollutants	Attachment 4
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List of Default Control Efficiency Ratings	Attachment 5
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State of Nevada
Division of Environmental Protection
Bureau of Air Pollution Control

**APPLICATION FOR
CLASS III OPERATING PERMIT**

Please return to: Nevada Division of Environmental Protection
Bureau of Air Pollution Control, Class II Permitting Branch
901 South Stewart Street, Suite 4001
Carson City NV 89701
(775) 687-9350 FAX (775) 687-6396

General Information

- This application is available from the Bureau of Air Pollution Control in a Microsoft Word file, or on the internet at <http://www.ndep.nv.gov/bapc>. All information required in the application may be computer generated and submitted to the Bureau on 3-1/2" disk(s) or CD(s). In addition, one printed copy must be submitted.
- All information required by the "General Company Information" and by the relevant forms in Appendices 1 through 6 must be completed.
- The application filing fee required by NAC 445B.327 must be submitted with the completed application. The fee for a new Class III Operating Permit is \$300. The fee for a modification or revision of a Class III Operating Permit is \$200. The fee for renewal of a Class III Operating Permit is \$250. Checks must be made payable to: Nevada State Treasurer, Environmental Protection.
- This application packet shall be used for new Class III sources, revisions to Class III Operating Permits, and renewals of Class III Operating Permits. This application packet is not for use for an administrative amendment, a general permit, a stand-alone surface area disturbance permit, nor for a request for change of location approval permit for a temporary source.
- Separate application forms for specific types of emission units are provided in Appendix 1. They include application forms for: (1) industrial processes, (2) combustion equipment, (3) storage silos, (4) liquid storage tanks and (5) surface area disturbances.
- An application for a Class III Operating Permit must be signed by a responsible official, as defined in NAC 445B.156. The certification/signature page is contained in Appendix 6.
- All items in the application must be addressed. If an item does not apply "N/A" or similar notation must be entered in the appropriate blank. All other information must be provided. Incomplete applications will be returned to the responsible official within 10 working days of receipt of the application packet.
- A **complete** application for renewal of a Class III Operating Permit must be submitted at least 30 calendar days before the expiration date of the current permit. The Bureau of Air Pollution Control suggests that the application be submitted well in advance of the 30 day deadline to ensure the application is complete.
- Assistance in completing the application is available from the Business Environmental Program, University of Nevada, Reno, at (775) 689-6678 or (800) 882-3233 (toll-free).

Application for Class III Air Quality Operating Permit



GENERAL COMPANY INFORMATION

All applicants shall complete each item or explain in the space provided why no information is needed. Please specify "N/A" (Not Applicable) if necessary. The application will be returned to the applicant if it is deemed incomplete.

1. **COMPANY NAME AND ADDRESS THAT ARE TO APPEAR ON THE OPERATING PERMIT**
[NAC 445B.295.1]:

(Name)

(Address)

(City)

(State)

(Zip Code)

2. Owner's Name and Address [NAC 445B.295.1]:

(Name)

(Address)

(City)

(State)

(Zip Code)

3. Source Name and Mailing Address, if different from #1 [NAC 445B.295.1]:

(Name)

(Address)

(City)

(State)

(Zip Code)

4. Physical Location of Stationary Source [NAC 445B.295.8]: (if no physical address, describe location, e.g., 4 miles south of I-80 at xx Interchange)

Township(s) _____ Range(s) _____ Section(s) _____

5. Plant Manager or Other Appropriate Contact [NAC 445B.295.1]:

(Name)

(Title)

(Address)

(City)

(State)

(Zip Code)

(Telephone #)

(FAX #)

(E-mail address)

GENERAL COMPANY INFORMATION (CONTINUED)

6. Responsible Official Name, Title and Address [NAC 445B.295.1]:

(Name)	(Title)	
(Address)		
(City)	(State)	(Zip Code)
(Telephone #)	(FAX #)	(E-mail address)

7. If records required under the operating permit will be kept at a location other than the source, specify that location [NAC 445B.295.7].

(Name)		
(Address)		
(City)	(State)	(Zip Code)

8. This application is being submitted for the following (please check appropriate box below):

- ☐ A new Class III Operating Permit
☐ Renewal of a Class III Operating Permit
☐ Revision of a Class III Operating Permit

9. **Application Submittal:**

Please remove the cover page, Table of Contents and General Information page and all Attachments of the application packet. Submit the remainder of the application packet as your formal application. This should consist of, at a minimum, the Class III Application cover page, the General Company Information, and Appendices 1 through 6.

Appendix 1

EMISSION UNITS APPLICATION FORMS

**(Industrial Process/Combustion Equipment/Storage Silo/
Liquid Storage Tank/ Surface Area Disturbance)**

Instructions

PLEASE RESPOND SEPARATELY TO ITEMS 1 through 5 FOR EACH EMISSION UNIT, as appropriate. Each emission unit at the stationary source must be identified by completion of the appropriate application form contained in this appendix. Forms may be duplicated as needed. Complete all applicable attachments (**Appendix 1**) included in this application package [NAC 445B.295].

- Section 1. Equipment Description: Provide information about the Standard Industrial Classification Code (SIC), describe the processes and products by SIC, including any associated with an alternative operating scenario identified in this application, model number, manufacture date, dimensions and UTM coordinates. [NAC 445B.295.3]
- Section 2. Design Rate/Operating Parameters: Describe all production rates, operating schedules and materials used in the process. [NAC 445B.295.3]
- Section 3. Fuel Usage: Describe all fuels and fuel usage. [NAC 445B.295.3]
- Section 4. Pollution Control Equipment/Exhaust Stack Parameters: Identify and describe all air pollution control equipment. [NAC 445B.295.4]
- Section 5. Requested Emission Limits: Provide the requested emission limits for each emission unit. Include emission rates of all regulated air pollutants that are subject to an emissions limitation pursuant to an applicable requirement. The emission rates must be described in pounds per hour and tons per year and in such terms as are necessary to establish compliance using the applicable standard reference test method. [NAC 445B.295.8, NAC 445B.3363(d)]

Alternative Operating Scenarios: Complete a separate application form for each emission unit having an alternative operating scenario. *(A common example of an alternative operating scenario is a steam boiler that utilizes natural gas as the primary fuel, but may combust diesel fuel as an alternate fuel source).* Please check the box in the upper right hand corner of each application form for emission units requesting an alternative operating scenario. Additionally, for each emission unit application form requesting an alternative operating scenario:

- 1. Define each alternative operating scenario [NAC 445B.296.1(a)];
- 2. Demonstrate that each scenario will comply with each applicable requirement or relevant requirement of NAC 445B.001 to 445B.3497, inclusive [NAC 445B.296.1(b)];
- 3. Detail proposed conditions, including monitoring and recordkeeping for each alternative operating scenario, which will ensure compliance. Contemporaneous log entries must be provided every time the source changes from one scenario to another [NAC 445B.296.1(c)].
- 4. Provide emission rates and detailed calculations for each alternative operating scenario in Appendix 4 [NAC 445B.296.1(d)].

Surface Area Disturbance

Complete a Surface Area Disturbance application form for any land disturbances that equal or exceed 5 acres. *(Note: The submittal of a dust control plan is required for each surface area disturbance, as specified in Appendix 5. Please provide the dust control plan in Appendix 5.)*

**INDUSTRIAL PROCESS
APPLICATION FORM
CLASS III OPERATING PERMIT**

☐ Check here if this is an
alternative operating scenario

Section 1 - Equipment Description

- a. Type of equipment _____
- b. Standard Industrial Classification (SIC) Code _____
- c. Manufacturer of equipment _____
- d. Model number _____ Serial number _____ *Equip. number _____
- e. Date equipment manufactured: _____
- f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☐ Stationary (At the same location for more than 12 months)
- g. For crushers: size output setting, check one: ☐ Primary ($\geq 4''$)
☐ Secondary ($< 4''$ but $\geq 1''$)
☐ Tertiary ($< 1''$)
- h. Please check if portable: ☐ Portable (transportable or movable within the confines of the stationary source)
- i. UTM Coordinates _____ meters N; _____ meters E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☐)
- j. Basic equipment dimensions (feet): L _____ W _____ H _____

*The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

- a. Maximum design capacity (tons per hour) _____
- b. Requested operating rate (tons per hour)* _____
- c. Requested operating time: (time of day)* _____ to _____
Hours per day _____ Days per year _____ Hours per year _____
- d. Batch load or charge weight (tons) (if applicable) _____
- e. Total hours required to process batch or charge (if applicable) _____
- f. Maximum operating rate (tons per year) _____
- g. Requested operating rate (tons per year)* _____
- h. Type of material processed _____
- i. Minimum moisture content _____

*Note: Please complete if other than the maximum design capacity (tons per hour and tons per year) and/or the maximum hours of operation (24 hours per day, 8760 hours per year) are being requested. The permit will be limited to these values.

INDUSTRIAL PROCESS APPLICATION FORM CONTINUED

Section 3 - Fuel Usage

(This section only applies to fuel consumed/combusted within the process unit. Fuels consumed/combusted in combustion units are to be listed on the Combustion Equipment Application Form.)

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
	gallons				
	gallons				
Gasoline	gallons				
Propane	cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)								

If more than one type of fuel is combusted, under this operating scenario please specify primary fuel and percentage on a maximum hourly and annual basis (if fuel blending is the primary fuel, identify percentages of each fuel blended). Attach additional information to this form if necessary.

*Firing of waste oil will require multi metals test to insure fuel is non-hazardous.

**INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED**

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters (this section must be completed)

-Complete for emissions exhausting through a stack, chimney or vent: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)		
Pollutant(s) Controlled		
Manufacturer		
Manufacturer's Guarantee (see Note 2)		
Stack height (feet from ground level)		
Stack inside diameter (feet)		
Temperature (°F) at design capacity		
Stack exit velocity (feet per second)		
Gas volume flow rate: Actual cubic feet per minute		
Gas volume flow rate: Dry standard cubic feet per minute		

-Complete for Emissions **not** exhausting through a stack, chimney or vent: (water sprays, fogging water sprays, pneumatic fogging system, high moisture ore, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)		
Pollutant(s) Controlled		
Manufacturer		
Manufacturer's Guarantee (see Note 1)		
Note: Indicate the specific point(s) of emission control application for this emission unit. This must be provided as part of the process flow diagram as required in section 7 of the General Information section of the application form.		

Note 1: Specify "uncontrolled" if no pollution control device is installed.

Note 2: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

**INDUSTRIAL PROCESS
APPLICATION FORM
CONTINUED**

Section 5 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)			
Particulates as PM ₁₀			
Sulfur Dioxide			
Carbon Monoxide			
Oxides of Nitrogen			
Volatile Organic Compounds			
Lead			
Hydrogen Sulfide			
Hazardous Air Pollutants (Specify Each Pollutant ¹)			
Other Regulated Pollutants (Specify ²)			

¹A list of Hazardous Air Pollutants is contained in Attachment 4.

²Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive.

**COMBUSTION EQUIPMENT
APPLICATION FORM
CLASS III OPERATING PERMIT**

☐ Check here if this is an
alternative operating scenario

Section 1 - Equipment Description

- a. Type of equipment _____
- b. Standard Industrial Classification (SIC) Code _____
- c. Manufacturer of equipment _____
- d. Model number _____ Serial number _____ *Equip. number _____
- e. Date equipment manufactured: _____
- f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☐ Stationary (At the same location for more than 12 months)
- g. Please check if portable: ☐ Portable (transportable or movable within the confines of the stationary source)
- h. UTM Coordinates _____ meters N; _____ meters E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☐)
- i. Basic equipment dimensions (feet): L _____ W _____ H _____

* The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

- a. **Maximum** design horsepower **OUTPUT** (horsepower per hour) _____
(Please provide for internal combustion engines only)
- b. **Maximum** design heat **INPUT** (million Btu per hour) _____
(Please provide for all combustion units except for internal combustion engines)
- c. *Requested operating time: time of day _____ to _____
Hours per day _____ Days per year _____ Hours per year _____

*Note: Please complete if other than the maximum hours of operation (24 hours per day, 8760 hours per year), are being requested. The permit will be limited to these values.

COMBUSTION EQUIPMENT APPLICATION FORM CONTINUED

Section 3 - Fuel Usage

(This section only applies to fuel consumed/combusted within the process unit. Fuels consumed/combusted in combustion units are to be listed on the Combustion Equipment Application Form.)

Type of Fuel	Amount Used Per Hour	Heat Content (specify in Btu's)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)
Oil- Specify Type(s)					
	gallons				
	gallons				
Gasoline	gallons				
Propane	cubic feet				
Natural Gas	cubic feet				
*Waste Oil	gallons				
Other					

Type of Fuel	Amount Used Per Hour (tons)	Heat Content (specify in Btus)	Ash Content (% by weight)	Sulfur Content (% by weight)	Trace Elements (% by weight)	Percent moisture	Percent volatile matter	Percent fixed carbon
Coal - Specify Type(s)								

If more than one type of fuel is combusted, under this operating scenario please specify primary fuel and percentage on a maximum hourly and annual basis (if fuel blending is the primary fuel, identify percentages of each fuel blended). Attach additional information to this form if necessary.

*Firing of waste oil will require multi metals test to insure fuel is non-hazardous.

**COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED**

Section 4 - Pollution Control Equipment/Exhaust Stack Parameters. This section must be completed.

-Complete for emissions exhausting through a stack, chimney or vent: (baghouse, wet scrubber, cyclone, low NO_x burner, no control, etc.)

	Control #1	Control #2
Type of Control (See Note 1)		
Pollutant(s) controlled		
Manufacturer		
Manufacturer's Guarantee (see Note 2)		
Stack height (feet from ground level)		
Stack inside diameter (feet)		
Temperature (°F) at design capacity		
Stack exit velocity (feet per second)		
Gas volume flow rate: Actual cubic feet per minute		
Gas volume flow rate: Dry standard cubic feet per minute		

Note 1: (Specify "uncontrolled" if no pollution control device is installed).

Note 2: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

**COMBUSTION EQUIPMENT
APPLICATION FORM
CONTINUED**

Section 5 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)			
Particulates as PM ₁₀			
Sulfur Dioxide			
Carbon Monoxide			
Oxides of Nitrogen			
Volatile Organic Compounds			
Lead			
Hydrogen Sulfide			
Hazardous Air Pollutants (Specify Each Pollutant ¹)			
Other Regulated Pollutants (Specify ²)			

¹A list of Hazardous Air Pollutants is contained in Attachment 4.

²Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive

**STORAGE SILO
APPLICATION FORM
CLASS III OPERATING PERMIT**

☐ Check here if this is an
alternative operating scenario

Section 1 - Equipment Description

- a. Type of equipment _____
- b. Standard Industrial Classification (SIC) Code _____
- c. Manufacturer of equipment _____
- d. Model number _____ Serial number _____ *Equip. number _____
- e. Date equipment manufactured: _____
- f. Please check one: ☐ Temporary (At the same location for less than 12 months)
☐ Stationary (At the same location for more than 12 months)
- g. Please check if portable: ☐ Portable (transportable or movable within the confines of the stationary source)
- h. UTM Coordinates _____ meters N; _____ meters E; Zone 11
(Please specify NAD 27 ☐ or NAD 83 ☐)
- i. Basic equipment dimensions (feet): L _____ W _____ H _____

* The equipment number is the facility's own numbering system for this piece of equipment.

Section 2 - Design Rate/Operating Parameters

- a. Maximum design storage capacity (tons) _____
- b. Maximum loading rate (tons per hour) _____ Loading time (hours to fill) _____
- c. *Requested loading rate (tons per hour): _____
*Hours per day _____ Days per year _____ Hours per year _____
- d. Maximum unloading rate (tons per hour) _____
- e. Method of unloading (screw auger, etc.) _____
- f. Continuous or batch discharge _____
- g. Requested unloading rate (tons per hour) _____
Requested unloading rate (tons per year) _____
- h. Requested unloading time: Hours per day _____ Time of day _____ to _____
Hours per day _____ Days per year _____ Hours per year _____
- i. Material type processed (lime, cement, flyash, etc.) _____

*Note: Please complete if other than the maximum loading rate (tons per hour), and/or the maximum hours of operation (24 hours per day, 8760 hours per year), are being requested. The permit will be limited to these values.

Section 3 –Reserved

**STORAGE SILO
APPLICATION FORM
CONTINUED**

Section 4 - Pollution Control Equipment (this section must be completed)

-Complete for emissions exhausting through a silo stack, chimney or vent during silo loading process:
(baghouse, wet scrubber, cyclone, no control, etc.)

	Control #1	Control #2
Type of Control: (See Note 1)		
Pollutant(s) Controlled		
Manufacturer		
Manufacturer's Guarantee (see Note 2)		
Stack height (feet from ground level)		
Stack inside diameter (feet)		
Temperature (°F) at design capacity		
Stack exit velocity (feet per second)		
Gas volume flow rate: Actual cubic feet per minute		
Gas volume flow rate: Dry standard cubic feet per minute		

-Complete for emissions exhausting through a silo stack, chimney or vent during silo unloading process:
(baghouse, wet scrubber, cyclone, no control, etc.)

	Control #1	Control #2
Type of Control: (See Note 1)		
Pollutant(s) Controlled		
Manufacturer		
Manufacturer's Guarantee (see Note 2)		
Stack height (feet from ground level)		
Stack inside diameter (feet)		
Temperature (°F) at design capacity		
Stack exit velocity (feet per second)		
Gas volume flow rate: Actual cubic feet per minute		
Gas volume flow rate: Dry standard cubic feet per minute		

Note 1: Specify "uncontrolled" if no pollution control device is installed).

Note 2: Manufacture's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

**STORAGE SILO
APPLICATION FORM
CONTINUED**

Section 4 - Pollution Control Equipment (continued)

-Complete for emissions not exhausting through a stack during silo unloading process: (water sprays, fogging water sprays, pneumatic fogging system, high moisture ore, no control, etc.)

	Control #1	Control #2
Type of Control: (See Note 1)		
Pollutant(s) Controlled		
Manufacturer		
Manufacturer's Guarantee (see Note 2)		
Stack height (feet from ground level)		
Stack inside diameter (feet)		
Temperature (°F) at design capacity		
Stack exit velocity (feet per second)		
Gas volume flow rate in cubic feet/minute (actual flow rate)		

Note 1: Specify "uncontrolled" if no pollution control device is installed).

Note 2: Manufacture's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

**STORAGE SILO
APPLICATION FORM
CONTINUED**

Section 5 - Requested Emission Limits - Silo Loading

Pollutant	Potential to Emit (pounds/hour)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)			
Particulates as PM ₁₀			
Sulfur Dioxide			
Carbon Monoxide			
Oxides of Nitrogen			
Volatile Organic Compounds			
Lead			
Hydrogen Sulfide			
Hazardous Air Pollutants (Specify Each Pollutant ¹)			
Other Regulated Pollutants (Specify ²)			

¹A list of Hazardous Air Pollutants is contained in Attachment 4.

²Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive.

**STORAGE SILO
APPLICATION FORM
CONTINUED**

Section 5 (continued) - Requested Emission Limits - Silo Unloading

Pollutant	Potential to Emit (pounds/hour)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)			
Particulates as PM ₁₀			
Sulfur Dioxide			
Carbon Monoxide			
Oxides of Nitrogen			
Volatile Organic Compounds			
Lead			
Hydrogen Sulfide			
Hazardous Air Pollutants (Specify Each Pollutant ¹)			
Other Regulated Pollutants (Specify ²)			

¹A list of Hazardous Air Pollutants is contained in Attachment 4.

²Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive.

**LIQUID STORAGE TANK
APPLICATION FORM
CLASS III OPERATING PERMIT**

☐ Check here if this is an
alternative operating scenario

Section 1 - Equipment Description

a.	Manufacturer of tank _____		
b.	SIC Code _____	c.	Liquid Stored _____
d.	Date of installation _____		
e.	Tank Dimensions:		
	Shell height (feet) _____	Shell diameter (feet) _____	
	Liquid height (feet) _____	Average liquid height (feet) _____	
	Volume (gallons) _____		
f.	Paint characteristics:		
	Shell color/shade (please check one)	<input type="checkbox"/> White/white <input type="checkbox"/> Aluminum/diffuse <input type="checkbox"/> Gray/medium	<input type="checkbox"/> Aluminum/specular <input type="checkbox"/> Gray/light <input type="checkbox"/> Red/primer
	Shell condition _____		
g.	Roof color/shade (please check one)	<input type="checkbox"/> White/white <input type="checkbox"/> Aluminum/diffuse <input type="checkbox"/> Gray/medium	<input type="checkbox"/> Aluminum/specular <input type="checkbox"/> Gray/light <input type="checkbox"/> Red/primer
	Roof condition _____		
h.	Roof characteristics:		
	Type (please check one):		
	<input type="checkbox"/> Cone <input type="checkbox"/> Dome <input type="checkbox"/> External floating roof <input type="checkbox"/> Internal floating roof		
	For cone or dome roof, specify height (feet) _____		
	For cone roof, specify slope (ft/ft) _____		
	For dome roof, specify radius (feet) _____		
	Tank construction: <input type="checkbox"/> welded <input type="checkbox"/> riveted		
	Primary rim seal: <input type="checkbox"/> vapor-mounted <input type="checkbox"/> liquid-mounted <input type="checkbox"/> mechanical shoe		
	Secondary seal: <input type="checkbox"/> weather shield <input type="checkbox"/> rim-mounted <input type="checkbox"/> none		
	Roof type: <input type="checkbox"/> pontoon <input type="checkbox"/> double deck		
	Roof fittings: <input type="checkbox"/> access hatch <input type="checkbox"/> gauge-float well <input type="checkbox"/> gauge-hatch/sample well		
	<input type="checkbox"/> rim vent <input type="checkbox"/> roof drains <input type="checkbox"/> roof leg <input type="checkbox"/> unslotted guide pole wells		
	<input type="checkbox"/> slotted guidepole/sample wells <input type="checkbox"/> vacuum breaker		
j.	For internal floating roof, please complete the following:		
	Primary seal: <input type="checkbox"/> resilient foam-filled <input type="checkbox"/> wiper seals <input type="checkbox"/> other (please specify) _____		
	Secondary seal: <input type="checkbox"/> resilient foam-filled <input type="checkbox"/> wiper seals <input type="checkbox"/> other (please specify) _____		
	Roof fittings: <input type="checkbox"/> access hatch <input type="checkbox"/> gauge-float well <input type="checkbox"/> gauge-hatch/sample well		
	<input type="checkbox"/> rim vent <input type="checkbox"/> roof drains <input type="checkbox"/> roof leg		
	<input type="checkbox"/> unslotted guide pole wells <input type="checkbox"/> slotted guidepole/sample wells		
	<input type="checkbox"/> vacuum breaker <input type="checkbox"/> column wells (# of columns _____)		
	<input type="checkbox"/> Ladder wells <input type="checkbox"/> stub drains		
k.	True vapor pressure of liquid (psia) _____		l. Reid vapor pressure of liquid (psi) _____
m.	UTM Coordinates _____ meters N; _____ meters E; Zone 11		
	(Please specify NAD 27 <input type="checkbox"/> or NAD 83 <input type="checkbox"/>)		

LIQUID STORAGE TANK APPLICATION FORM CONTINUED

Section 2 - Operating Parameters

a.	Maximum throughput (gallons per year) _____
b.	Method of filling (submerged fill) _____

Section 3 - Reserved

Section 4 - Pollution Control Equipment (this section *must* be completed)

-Complete for emissions exhausting through a stack, chimney or vent: (baghouse, wet scrubber, cyclone, internal floating roof, no control, etc.)

	Control #1	Control #2
Type of Control:		
Pollutant(s) Controlled		
Manufacturer		
Manufacturer's Guarantee (see Note 1)		
Stack height (feet from ground level)		
Stack inside diameter (feet)		
Temperature (°F) at design capacity		
Stack exit velocity (feet per second)		
Gas volume flow rate: actual cubic feet per minute		
Gas volume flow rate: dry standard cubic feet per minute		

Note 1: (Specify "uncontrolled" if no pollution control device is installed).

Note 2: Manufacturer's guarantee of control efficiency must be attached to this form if the control efficiency claimed is greater than the control efficiency ratings provided in the Bureau of Air Pollution Control's Emissions Control Technology - Control Efficiency Ratings provided in Attachment 4.

**LIQUID STORAGE TANK
APPLICATION FORM
CONTINUED**

Section 5 - Requested Emission Limits

Pollutant	Potential to Emit (pounds/hour)	Potential to Emit (tons/year)	Calculation (including reference) on Which Emissions Information is Based (attach supporting information if necessary)
Total Particulate Matter (PM)			
Particulates as PM ₁₀			
Sulfur Dioxide			
Carbon Monoxide			
Oxides of Nitrogen			
Volatile Organic Compounds			
Lead			
Hydrogen Sulfide			
Hazardous Air Pollutants (Specify Each Pollutant ¹)			
Other Regulated Pollutants (Specify ²)			

¹A list of Hazardous Air Pollutants is contained in Appendix 4.

²Other Regulated Pollutants include any Class I or Class II substance subject to a standard adopted pursuant to 42 U.S.C. SS 7671-8671q, inclusive.

**SURFACE AREA DISTURBANCE
APPLICATION FORM
CLASS III OPERATING PERMIT**

1. Project Name _____

2. Surface Area Disturbance Location:

Overall disturbance location description:

Township _____; Range _____; Section(s) _____;

Township _____; Range _____; Section(s) _____;

Township _____; Range _____; Section(s) _____;

Township _____; Range _____; Section(s) _____;

Township _____; Range _____; Section(s) _____;

Township _____; Range _____; Section(s) _____;

Township _____; Range _____; Section(s) _____;

Township _____; Range _____; Section(s) _____;

3. Indicate the total number of acres to be disturbed for the project _____

4. Nevada Administrative Code 445B.22037 requires fugitive dust to be controlled (regardless of the size or amount of acreage disturbed), and requires an ongoing program, using best practical methods, to prevent particulate matter from becoming airborne. All activities which have the potential to adversely affect the local air quality must implement all appropriate measures to limit controllable emissions. Appropriate measures for dust control may consist of a phased approach to acreage disturbance rather than disturbing the entire area all at once; using wet suppression through such application methods as water trucks or water sprays systems to control wind blown dust; the application of soil binding agents or chemical surfactant to roadways and areas of disturbed soil; as well as the use of wind-break or wind-limiting fencing designed to limit wind erosion of soils.

5. Dust Control Plan (please visit <http://ndep.nv.gov/bapc> for additional information regarding dust control plans).

a. For Pahrump Valley, please include a dust control plan in Appendix 6 if the total number of acres to be disturbed listed in 3 above equals or exceeds 5 acres.

b. Please include a dust control plan in Appendix 6 if the total number of acres to be disturbed in number 3 above equals or exceeds 20 acres (except for Pahrump Valley in a above).

The dust control measures discussed in 4 above should be considered in the preparation of the required dust control plan. The acceptance of the dust control plan by the Bureau of Air Quality does not limit the permit holder's need to control fugitive dust from the disturbance and its related activities, nor from putting into effect an ongoing program for using the best practical methods of dust control.

Appendix 2

INSIGNIFICANT ACTIVITY INFORMATION FORM

Instructions

Attachment 1 contains the Approved List of Insignificant Activities. Attachment 3 contains the List of Trivial Activities. Trivial activities are exempted from consideration. **PLEASE RESPOND ON THE INSIGNIFICANT EMISSION UNITS INFORMATION FORM TO SECTIONS 1 THROUGH 4, FOR EACH INSIGNIFICANT EMISSION UNIT** [NAC 445B.295.8].

- Section 1. List all insignificant activities that are exempt pursuant to NAC 445B.288.2(a) through (h), and list the appropriate section that provides for the exemption. Provide information sufficient to show that the exemption applies (a copy of NAC 445B.288.2 is provided in Attachment 2).
- Section 2. List all insignificant activities that are exempted because they are on the list approved and maintained by the Director pursuant to NAC 445B.288.4. Provide information sufficient to show that the exemption applies.
- Section 3. List all proposed insignificant activities that are not already contained in the list in Attachment 1. Provide sufficient description of activities, and all emission calculations and references. The list of proposed insignificant activities must also be submitted, under separate cover, to the Director for his review and approval.
- Section 4. This section must be completed if the potential to emit for all other emitting activities associated with the stationary source exceeds 60 tons per year for any individual regulated air pollutant. If the potential to emit is below the 60 ton per year threshold, only sections 1 through 3 of this form must be completed (-lease attach additional sheets as necessary). If the potential to emit exceeds the 60 tons per year threshold, emissions calculations to determine maximum uncontrolled emissions for each insignificant activity must be provided and included in Appendix 4. Calculate the maximum uncontrolled emissions for insignificant activities listed under Sections 1 through 3, if the . Emissions calculations must be based on the maximum design throughput, maximum design production rate, maximum design heat input rate value, no controls, and 8760 hours per year of operation, unless otherwise indicated in NAC 445B.288.2 or on the list of approved insignificant activities provided in Attachment 1.

Section 1 - List All Emission Units that are Insignificant Activities Pursuant to NAC 445B.288.2(a) through (h) (see Attachment 2 for regulation).

Emission Unit	Exemption Regulation (Example - NAC 445B.288.2(b))	Reason Exemption Applies

Section 2 - List All Emission Units Proposed as Insignificant Activities Pursuant to List Approved by the Director (see Attachment 1 - List of Approved Insignificant Activities)

Emission Unit	Reason Exemption Applies

Section 3 - List All Emission Units Proposed as Insignificant Activities and Not Otherwise Listed in Section 1 or Section 2 (NAC 445B.288.4). Proposed insignificant activities from this Section must be submitted, under separate cover, to the Director for his approval. The submittal must include a sufficient description of the emission unit(s), all emissions calculations, and references.

Emission Unit

Section 4 -Emissions Calculations - Insignificant Emission Units/Activities

Calculate the maximum uncontrolled emissions for insignificant activities listed under Sections 1 through 3. Emissions calculations must be based on the maximum design throughput, maximum design production rate, maximum design heat input rate value, no controls, and 8760 hours per year of operation, unless otherwise indicated in NAC 445B.288.2 or on the list of approved insignificant activities provided in Attachment 1. No consideration for emissions reduction from pollution controls or limits on the hours of operation or other operational constraints may be allowed unless otherwise approved by the Director or as indicated in NAC 445B.288.3 or on the list provided in Attachment 1.

Appendix 3

FACILITY-WIDE POTENTIAL TO EMIT TABLES

Provide the stationary source's total emissions by completing Table 1 and Table 2 of Appendix 4. *(Note: Table 1 must include the insignificant activity emissions identified in Table 2.)* [NAC 445B.295.8].

TABLE 1

**FACILITY-WIDE (STATIONARY SOURCE)
POTENTIAL TO EMIT
POUNDS/HOUR AND TONS/YEAR**

Pollutant	Potential to Emit (pounds/hour)	Potential to Emit (tons/year)
Total Particulate Matter (PM) ¹		
Particulates as PM ₁₀ ¹		
Sulfur Dioxide ¹		
Carbon Monoxide ¹		
Oxides of Nitrogen ¹		
Volatile Organic Compounds ¹		
Lead ²		
Hazardous Air Pollutants (Specify Each Pollutant)		
Other Regulated Pollutants (Specify)		

Note 1: Emissions total from pollutants cannot exceed 5.0 tons per year.

Note 2: Emissions total cannot exceed 1,000 pounds per year.

**INSIGNIFICANT ACTIVITIES
POTENTIAL TO EMIT
POUNDS/HOUR AND TONS/YEAR**

Page 2 of 2

Appendix 4

DETAILED EMISSIONS CALCULATIONS

Please Attach Emission Calculations

Instructions

1. Provide descriptions of all emissions, and emission rates of regulated air pollutants (in pounds per hour and tons per year) from each emission unit. [NAC 445B.295.8]
2. Provide all supporting calculations for the emission rates specified in 1 above. This information shall be provided for each emission unit. (*Note: A listing of default emission control efficiency values is contained in Attachment 4.*) [NAC 445B.295.8]
3. Provide all emissions of regulated air pollutants (in pounds per hour and tons per year) from **each insignificant activity** (see Section 4 of Appendix 2 to determine if these calculations are required), and calculations and supporting documentation. The emissions and supporting calculations should reflect all insignificant activities listed in Appendix 2. [NAC 445B.295.8]

Appendix 5

**NARRATIVE
DESCRIPTION**

-

**PROCESS FLOW
DIAGRAM**

-

PLOT PLAN

-

MAP

-

DUST CONTROL PLAN

Instructions

This Appendix must include the following:

1. A narrative description of the entire process. The narrative must include descriptions of all emissions of any regulated air pollutants from all emission units. [NAC 445B.295.8]
2. A detailed process flow diagram of all processes indicating emissions control application points, throughput rate/design heat input rate value, and emission unit identification numbers. [NAC 445B.295.8]
3. A plot plan of the entire source, drawn to scale (include scale). The plot plan shall include the location of all emission units (clearly labeled), emission release points (stack and/or emission point locations, clearly labeled), the fence line, and the property boundary. [NAC 445B.295.8]
4. A USGS 7-1/2" or 15" map or other topographic map (with topographic lines clearly visible) indicating the following [NAC 445B.295.8]:
 - a. Exact location of entire source (also indicate all areas of surface disturbance).
 - b. Property boundary.
 - c. Location of fence or other physical barrier around source (NOTE: This is required.)
 - d. Scale of map.
 - e. UTMs, if other than a USGS 7-1/2" or 15" map is submitted.
 - f. Elevation contours and contour intervals, and contour values, clearly visible and in sufficient detail to determine elevations.
5. For surface area disturbance that will exceed 20 acres, provide a dust control plan, with the exception of Pahrump Valley. In Pahrump Valley, for surface area disturbance of **5 acres or more**, please provide a dust control plan. [NAC 445B.295.8]

Appendix 6

APPLICATION CERTIFICATION

Please complete the certification checklist for all forms and information provided in your application submittal. The responsible official must sign and date the application certification found in Appendix 9. *If the application is signed by a person other than the responsible official, as defined in NAC 445B.156, the application will be returned as incomplete.*

Note: According to NAC 445B.156, **Responsible Official** means:

1. For a corporation:
 - (a) A president;
 - (b) A vice president in charge of a principal business function;
 - (c) A secretary;
 - (d) A treasurer; or
 - (e) An authorized representative of such a person who is responsible for the overall operation of the facility and who is designated in writing by the officer of the corporation and approved in advance by the director.
2. For a partnership or sole proprietorship: a general partner or the proprietor, respectively.
3. For a municipality or a state, federal or other public agency: a ranking elected official or a principal executive officer, including, for a federal agency, a chief executive officer who has responsibility for the overall operations of a principal geographic unit of the agency.
4. For an affected source: the designated representative or his alternate, as defined in 42 U.S. C. § 7651 a (26).

APPLICATION CERTIFICATION

Certification of application content consisting of the following:

(Please check each of the appropriate boxes to indicate the information provided in your application submittal)

General Company Information

☐ General Company Information Form

Emission Unit Application Forms (Appendix 1)

☐ Industrial Process Application Form(s)

☐ Combustion Equipment Application Form(s)

☐ Storage Silos Application Form(s)

☐ Liquid Storage Tank Application Form(s)

☐ Surface Area Disturbance Form(s)

Insignificant Emissions Unit Information (Appendix 2)

☐ Insignificant Emissions Unit Information Form(s)

Facility-Wide Potential To Emit Tables (Appendix 3)

☐ Table 1 - Facility-Wide Potential To Emit

☐ Table 2 - Insignificant Activities Potential To Emit

Detailed Emissions Calculations (Appendix 4)

☐ Detailed Emissions Calculations Provided

Process Narrative, Process Flow Diagram, Plot Plan, Map, Dust Control Plan (Appendix 5)

☐ Process Narrative Provided

☐ Flow Diagram Provided

☐ Plot Plan Provided

☐ Map Provided

☐ Dust Control Plan Provided

Application Certification (Appendix 6)

☐ Application Certification

PLEASE NOTE THE FOLLOWING REQUIREMENTS WHICH APPLY TO PERMIT APPLICANTS DURING THE APPLICATION PROCESS:

- A. A permit applicant must submit supplementary facts or corrected information upon discovery [NAC 445B.297.1(b)].
- B. A permit applicant is required to provide any additional information which the Director requests in writing within the time specified in the Director's request [NAC 445B.297.1(c)].
- C. Submission of fraudulent data or other information may result in prosecution for an alleged criminal offense (NRS 445B.470).

CERTIFICATION: I certify that, based on information and belief formed after reasonable inquiry, the statements contained in this application are true, accurate and complete.

Signature of Responsible Official

Print or Type Name **and** Title

Date

ATTACHMENT 1

LIST OF APPROVED INSIGNIFICANT ACTIVITIES

NAC 445B.288.2

Insignificant Activities

The following insignificant activities have been approved by the director in accordance with NAC 445B.288.4:

- Crematory Incinerators processing <175 tons per year (1/24/96)
- Autoclave re-bricking (3/1/96)
- Prill silos <100,000 tons/year (3/1/96)
- Parts cleaners - cold cleaning only (3/1/96)
- Storage tanks, as follows: (3/1/96)

<u>Emission Unit</u>	<u>Tank size (gallons)</u>	and	<u>Vapor Pressure (PSIA)</u>
non-HAP VIL*	<40,000		<0.60
non HAP VIL	<200,000		<0.13
HAP VIL	<40,000		<0.15
HAP VIL	<200,000		<0.03
Liquid NaCN	any size		N/A
*VIL - volatile inorganic liquid			

- Portable screening plant, processing 100,000 tons of metallic mineral, in less than 6 months, with 4% moisture content (3/5/96)
- Carbon strip/electrowinning circuit, with a total liquid surface area of less than 610 square feet and a solution flow rate less than 400 gallons per minute (6/12/96)
- Mine analytical laboratory fume hoods (6/12/96)
- Mine metallurgical laboratory fume hoods (6/12/96)
- Landfarming of not more than 270,000 tons per year of diesel-based hydrocarbon contaminated soil, with a concentration of less than 50,000 ppm Total Petroleum Hydrocarbons. (6/12/96)
- Landfarming of not more than 338 tons per year of gasoline-based hydrocarbon contaminated soil, with a concentration of less than 50,000 ppm Total Petroleum Hydrocarbons. (6/12/96)
- Sand washing operations, consisting of material unloading by continuous drop feed on a feed conveyor, double deck screen/wash with two feed conveyors to the materials stockpile, processing the following: (1) less than 765,000 tons per year at the following moisture contents: material unloading and conveyor belt at least 1.5% moisture, screen and tow conveyor belts at least 7.0% moisture; (2) less than 805,000 tons per year at the following moisture contents: material unloading and conveyor belt at least 1.5% moisture, screen and tow conveyor belts at least 7.5% moisture; (3) less than 844,000 tons per year at the following moisture contents: material unloading and conveyor belt at least 1.5% moisture, screen and two conveyor belts at least 8.5% moisture. (6/12/96)
- Lime silo, located at Newmont Gold Company's Rain Project, 127 ton storage capacity, equipped with silo discharge auger which is physically limited to 1.50 tons per hour of discharge of lime (13,140 tons per year). (7/13/98)
- Chemistry laboratory at the HWAD Main Base. (8/24/98)
- Transloading facility for lime, consisting of railcar transfer to screw conveyor, screw conveyor to belt conveyor, belt conveyor to truck, transferring 80 tons per hour, for Continental Lime Inc.'s Dunphy Transloading facility. (1/13/99)

- Newmont Gold Company - Shotcrete Plant described as follows: two (2) cement silo augers, cement metering bin, mix box containing washed pea gravel and sand, and auger to shotcrete transport truck. Shotcrete plant throughput is physically limited by shotcrete discharge auger, at 25.6 tons per hour (19.84 tons per hour gravel/sand and 5.76 tons per hour cement). (4/27/99) (revised 2/20/01)
- SmartAsh 100 disposal unit, specified as follows: 55 gallon steel open head drum, stainless steel lid, plated tubular steel frame, 2 blowers, for burning absorbent materials, paper waste, wood by-products, rags, used filters, waste oil, and other **non-hazardous** waste at a rate of 50 pounds per hour. (5/7/99)
- One evaporator/condenser located at Quebecor Printing Nevada's Fernley facility with a maximum design capacity of 2000 gallons per day. (11/30/99)
- Transloading facility for flyash, consisting of railcar transfer to screw conveyor, screw conveyor to belt conveyor, belt conveyor to truck, transferring 80 tons per hour, for Continental Lime Inc.'s Dunphy Transloading facility. (12/1/99)
- Battery decasing, decanning, washing and waste water treatment operations, located at NAVSEA-HWAD. Combined mercury-zinc, mercury-cadmium and silver-zinc battery process rate not to exceed 1000 batteries per hour and 260,000 batteries per year. Only one battery type may be processed at any given time. Mercury content not to exceed 0.552 pounds per battery. Total uncontrolled mercury emissions from the battery decasing, decanning, washing and wastewater treatment operations not to exceed 0.1 pounds per hour and 26 pounds per year. (5/15/2000)
- Crawford Animal Crematories - Model CB400 and a Model 500P to be located at the Silver Hills Vet Hospital in Carson City. The crematories are to be used for the destruction of animal carcasses only. (12/12/00)
- MCI WorldCom - Six Generac 96A04605-S, 60kW, diesel generators - One each at the following locations: Argenta, Lander County; Carlin, Elko County; Clover Valley, Elko County; Shafter, Elko County; Stonehouse, Humboldt County. (2/20/01)
- Newmont Gold Company's Portable Cement Mixing Plant consisting of - a mix tank for generating cement slurry, and an auger with a maximum throughput of 700 pounds of cement per minute. (2/20/01)
- Barrick Goldstrike Mines, Inc., Pilot Scale Fluidized Bed Roaster w/ Integral Quenching Eductor. Maximum material throughput of 45 pounds per hour with a roaster operating temperature range between 700° and 1200° F. (4/3/01)
- Industrial Metals & Mining, LLC's ore processing operation located in Silver Springs, Nevada consisting of - weigh and assaying of incoming ore, ore roasting, ore sizing, and ore loading to liquid process solution system. (8/10/01)
- Oglebay Norton Industrial Sands, Inc.'s portable sand transloading conveyor. (10/10/01)
- Paramount Nevada Asphalt Company's emulsified asphalt plant. (5/22/02)
- Crawford Animal Crematories, Model C500P natural-gas fired crematory, 75 pounds/hour capacity, located at Great Basin Pet Crematory in Elko. The crematory is to be used for the destruction of animal carcasses only. (10/28/02)
- Bently Nevada, LLC, screen printing operation, manual, processing <50 lb/hr. (12/18/02)
- RMC Nevada, Inc., portable aggregate stacking conveyor which will convey 50 thousand tons of washed sand with approximately 8% moisture into railcars. The conveyor is powered by a 115 h.p. engine. (1/16/03)
- Explosive ordnance training for crime and terrorist scene investigators (post-blast analysis) - An inoperable vehicle (battery and fluids removed) will be destroyed by explosion of 500 pounds of ammonium nitrate per event, not to exceed eight (8) events per 12 month rolling period. Activity will be conducted on a secure range closed to public access on NAS Fallon. (6/25/03)
- Bently Nevada, LLC, potting ovens - electric-heated, components placed in potting cups or trays and potting compound manually poured into the cups or trays. Trays of components are then placed into the potting ovens for curing. (7/24/03)

- Bently Nevada, LLC, transducers-related ovens - used for curing small quantities of epoxy placed on wires, cables, and electrical leads. Average temperature of each oven is 135 to 150 degrees F. (7/24/03)
- Bently Nevada, LLC, plastic mold extruders - feeding of solid plastic beads which are melted and extruded into molds. The barrel of the extruder holds 2 pounds of plastic beads, which are heated to 700 degrees F. Mold temperature is 360 degrees F. (7/24/03)
- Bently Nevada, LLC, CNC lathes and mills, using water-based coolant and oil. (7/24/03)
- Bently Nevada, LLC, conformal coating - conformal coating is the process of spraying a dielectric material onto circuit boards or components. Curing takes place in a conformal coating machine. (7/24/03)
- Bently Nevada, LLC, solder paste application/surface mount/reflow oven - approximately 0.5 gram of solder paste is applied from a 700 gram hand-held tube to each printed circuit board, then a machine wipes the solder paste over the board through a stencil. Components are then surface mounted onto the printed circuit board with a pick and place machine. The surface mounted components are then joined to the printed circuit board inside an electric-powered reflow oven. (7/24/03)
- Bently Nevada, LLC, evaporator - dirty stencils that are used for solder paste application are soaked and cleaned in a bath of water and detergent (Smart Sonic brand). (7/24/03)
- Nevada Cement Company, cooling tower, 300 gallon per minute capacity, with a maximum Total Dissolved Solids concentration of 500 ppm. (7/28/03)
- Newmont Mining Corporation, Lone Tree Mine, Process Cooling Tower (4 cells), NC7043, 3,006 gallons per minute, with a maximum Total Dissolved Solids concentration of 1,680 ppm. (9/4/03)
- Newmont Mining Corporation, Lone Tree Mine, Lube System Cooling Tower (1 cell), NC4001, 540 gallons per minute, with a maximum Total Dissolved Solids concentration of 1,100 ppm. (9/4/03)
- Newmont Mining Corporation, Lone Tree Mine, Oxygen Plant Cooling Tower, (2 cells), NC8012, 1,900 gallons per minute, with a maximum Total Dissolved Solids concentration of 1,480 ppm. (9/4/03)
- Department of the Air Force, Nellis Air Force Base, Nellis Test and Training Range, 17 fuel dispensing operations, designated as TTR1 through TTR12, FDS006 and FDS007, and FDS016 through FDS018. (10/10/03)
- Department of the Air Force, Nellis Air Force Base, Nellis Test and Training Range, 11 fuel loading operations, designated as FLD004 through FLD014. (10/10/03)
- Quebecor World, flexographic plate maker, using no more than 605 gallons per year of VOC product. (11/7/03)
- Quebecor World, five (5) evaporative cooling towers, with a combined water recirculation rate of 6,052 gallons per minute, and a maximum Total Dissolved Solids Concentration of 12,000 ppm. (11/7/03)
- Nevada Wood Preserving, cooling tower, 150 gallons per minute, with a maximum Total Dissolved Solids concentration of 24,000 ppm. (11/20/03)
- Queenstake Resources USA, Inc., three roaster cooling towers, 1,500 gallons per minute each, with a maximum Total Dissolved Solids concentration of 12,000 ppm. (12/9/03)
- Queenstake Resources USA, Inc., oxygen plant cooling tower, 2,699 gallons per minute, with a maximum Total Dissolved Solids concentration of 150 ppm. (12/9/03)
- Newmont Mining Corporation, Twin Creeks Mine, lube system cooling tower, 1,208 gallons per minute, with a maximum Total Dissolved Solids concentration of 2,170 ppm. (12/9/03)
- Newmont Mining Corporation, Twin Creeks Mine, laboratory sample reject bin, processing no more than 2 tons per hour. (12/9/03)
- Orica USA, Inc. prill transloading facility with two silos of 50,000 tons per year of throughput each located in Humboldt County, NV. Only one silo can operate at a time. (3/15/04)

- Queenstake Resources USA, Inc. portable concrete mixing plant located at the Jerriitt Canyon Mine with a maximum throughput rate of 200 yd³ of concrete per hour and 60,000 yd³ of concrete per year. (5/28/04)
- Starbucks Coffee Company, Minden Facility, cooling tower, 125 gallons per minute, with a maximum Total Dissolved Solids concentration of 12,000 ppm (5/28/04)
- Global West Industries, LLC feldspar/bentonite silo located in Lovelock, NV with a maximum throughput rate of 10 tons per hour (8/06/04)
- Barrick Goldstrike Mines, Inc., Temporary Shotcrete Plant; maximum shotcrete material throughput rate of 36 yd³ per hour and 13,140 yd³ per year (8/13/04)
- Queenstake Resources USA, Inc. laboratory assay furnaces located at the Jerriitt Canyon Mine with a maximum throughput rate of 100 assays of flux and ore per hour. (12/14/04)
- Barrick Goldstrike Inc. Meikle & Autoclave cooling towers, and Autoclave acidulation tanks located at the Goldstrike Mine; TDS for each of the cooling towers is 2,000 ppm and the maximum throughput rate of sulfuric acid (H₂SO₄) for each of the acidulation tanks is 413.0 gallons per hour. (12/28/04)
- Nevada Wood Preserving, Baltimore Aircoil cooling tower, 150 gallons per minute, with a maximum Total Dissolved Solids concentration of 24,000 ppm. (5/18/05)
- Taiyo America, Inc. Argus Spray/Oven Unit, Model No. PC9324B/PC9624 (6/6/05)
- Robinson Nevada Mining Company, a by-product molybdenum plant as an adjunct to its copper processing facility at Ruth, Nevada (7/19/05)
- James Hardie Building Products, Inc. Additive 2 Production Unit – consists of one 6,000 gallon storage tank for non-VOC liquids; two 1,500 gallon mixing tanks with condensers; separation column/evaporator; one 6,000 gallon by-product tank; one 1,500 gallon product storage tank; one 500 gallon acid storage tank; one 2MMBtu/hr natural gas fired boiler. (7/19/05)
- Chromalloy Nevada. 50 Beltsand booths processing 3 parts per hour each and 30 Unihone Grit Blast Cabinets undergoing 1 hopper change per day each (8/22/05).
- Nevada Department of Corrections – Northern Nevada Correctional Center. Wood Fuel Handling System for the Wood Fired Steam Boiler System. Wood Fuel Handling System consists of a submerged auger, flat bed conveyor, inclined conveyor, and fuel metering bin with a maximum process throughput of 2.375 tons of wood chips per hour.(1/25/06). Cooling Tower for Wood Fired Steam Boiler System. (1/18/06)

ATTACHMENT 2
NAC 445B.288

NAC 445B.288 Operating permits: Exemptions from requirements; insignificant activities. (NRS 445B.210, 445B.300)

1. The following categories of sources are not required to obtain an operating permit:

(a) A source that would otherwise be required to obtain an operating permit solely because it is subject to 40 C.F.R. Part 60, Subpart AAA, Standards of Performance for New Residential Wood Heaters.

(b) A source that would otherwise be required to obtain an operating permit solely because it is subject to 40 C.F.R. Part 61, Subpart M, National Emission Standard for Asbestos, section 61.145.

(c) Agricultural equipment used in the normal operation of a farm, other than agricultural equipment which is classified as, or located at, a source for which a permit is required under Title V of the Act or which is subject to any standard set forth in 40 C.F.R. Part 60 or 61.

2. The following emission units are considered to be insignificant activities unless the emission unit is otherwise subject to another specific applicable requirement, including, without limitation, any requirement or standard set forth in 40 C.F.R. Part 60, 61 or 63:

(a) Any equipment or other contrivance used exclusively for the processing of food for human consumption.

(b) An incinerator which has a rated burning capacity that is less than 25 pounds per hour.

(c) An emission unit that has a maximum allowable throughput or batch load rate of less than 50 pounds per hour, unless the emission unit directly emits, or has the potential to emit, a hazardous air pollutant.

(d) A storage container for petroleum liquid, or a storage facility for volatile organic liquid, that has a capacity of less than 40,000 gallons.

(e) Except as otherwise provided in paragraphs (f), (g) and (h), air-conditioning equipment or fuel-burning equipment that, individually, has a rating which is:

(1) Less than 4,000,000 Btu's per hour; or

(2) Equal to or greater than 4,000,000 Btu's per hour if the equipment operates less than 100 hours per calendar year.

(f) A portable internal combustion engine that has a rating for output which is:

(1) Less than 500 horsepower; or

(2) Equal to or greater than 500 horsepower if the engine operates less than 100 hours per calendar year.

(g) A stationary internal combustion engine that has a rating for output which is:

(1) Less than 250 horsepower; or

(2) Equal to or greater than 250 horsepower if the engine operates less than 100 hours per calendar year.

(h) An emergency generator. Except as otherwise provided in this paragraph, an emergency generator qualifies as an insignificant activity pursuant to this paragraph only if the emergency generator is an internal combustion engine that is used to generate electrical power to maintain essential operations during unplanned electrical power outages. An emergency generator that is owned or operated by a Class II source and whose potential to emit is calculated on the basis of less than 500 hours of operation does not qualify as an insignificant activity.

3. If an emission unit is considered an insignificant activity and is subject to a limitation on its hours of operation pursuant to subsection 2, the owner or operator of the emission unit shall maintain an operating log of the hours of operation of the emission unit. The operating log must be maintained at the site of the emission unit and made available to the director upon his request. The owner or operator shall retain the operating log for not less than 5 years.

4. The director may, upon written request and a satisfactory demonstration by an applicant, approve an emission unit as an insignificant activity if the emission unit is not otherwise subject to another specific applicable requirement, including, without limitation, any requirement or standard set forth in 40 C.F.R. Part 60, 61 or 63. To be approved as an insignificant activity, an emission unit must meet the following criteria:

(a) The operation of the emission unit, not considering controls or limits on production, type of materials processed, combusted or stored, or hours of operation, will not result in:

(1) Emissions of a hazardous air pollutant that exceed 1 pound per hour or 1,000 pounds per year, as appropriate;

(2) Emissions of regulated air pollutants that exceed 4,000 pounds per year;

(3) Emissions of regulated air pollutants that exceed any other limitation on emissions pursuant to any other applicable requirement; or

(4) Emissions of regulated air pollutants that adversely impact public health or safety, or exceed any ambient air quality standards; and

(b) The emissions from the emission unit are not relied on to avoid any other applicable requirements.

If there are multiple emission units, the director may, after considering the impact of the combined emissions of multiple emission units, determine whether to approve one or more of the specific emission units as an insignificant activity.

5. Except as otherwise provided in NAC 445B.094, emissions from insignificant activities, as determined pursuant to this section, must be included in any determination of whether a stationary source is a major source.

6. A stationary source is not required to obtain an operating permit pursuant to NAC 445B.001 to 445B.3485, inclusive, for any emission unit determined to be an insignificant activity in accordance with this section, as long as the stationary source is not otherwise subject to any other requirement to obtain an operating permit under Title V of the Act. Such an exclusion from the requirements relating to permitting is not an exclusion or exemption from any other requirement set forth in NAC 445B.001 to 445B.3485, inclusive, relating to the operation of the emission unit determined to be an insignificant activity.

7. A stationary source which consists solely of insignificant activities as determined pursuant to this section and which is not otherwise subject to any other requirement to obtain an operating permit under Title V of the Act is not required to obtain an operating permit to operate as a stationary source. Such an exclusion from the requirements relating to permitting is not an exclusion or exemption from any other requirement set forth in NAC 445B.001 to 445B.3485, inclusive, relating to the operation of the stationary source or any insignificant activity that is a part of the stationary source.

[Environmental Comm'n, Air Quality Reg. § 3.1.8, eff. 11-7-75]—(NAC A 10-22-87; 12-8-89; 9-19-90; 11-23-92; 12-13-93, eff. 11-15-94; 3-29-94, eff. 11-15-94; 10-30-95; R117-00, 6-1-2001)

ATTACHMENT 3

LIST OF TRIVIAL ACTIVITIES

STATE OF NEVADA TRIVIAL ACTIVITIES LIST

The following types of activities and emission units may be presumptively omitted from Class I applications. Certain of these listed activities include qualifying statements intended to exclude many similar activities. Trivial activities are emission units without specific applicable requirements under Title V of the Clean Air Act Amendments of 1990 and with extremely small emissions. There are also no applicable State Implementation Plan requirements for these activities. As of June 12, 1998, cooling towers have been removed from this list and must be treated as a permitted item or insignificant activity.

- Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources
- Air-conditioning units used for human comfort that do not have applicable requirements under Title VI of the CAA
- Ventilating units used for human comfort that do not exhaust air pollutants into the ambient air from any manufacturing/industrial or commercial process
- Non-commercial food preparation
- Consumer use of office equipment and products, not including printers or businesses primarily involved in photographic reproduction
- Janitorial services and consumer use of janitorial products
- Internal combustion engines used for landscaping purposes
- Laundry activities, except for dry-cleaning and steam boilers
- Bathroom/toilet vent emissions¹
- Emergency (backup) electrical generators at residential locations
- Tobacco smoking rooms and areas
- Blacksmith forges
- Facility maintenance and upkeep activities (e.g., groundskeeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification¹
- Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or degreasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification
- Portable electrical generators that can be moved by hand from one location to another. (NOTE: "Moved by hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device)
- Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic
- Brazing, soldering and welding equipment, and cutting torches related to manufacturing and construction activities that do not result in emission of HAP metals¹

¹Brazing, soldering and welding equipment, and cutting torches related to manufacturing and construction activities that emit HAP metals are more appropriate for treatment as insignificant activities based on size or production level thresholds.

STATE OF NEVADA
TRIVIAL ACTIVITIES LIST

- Air compressors and pneumatically operated equipment, including hand tools
- Batteries and battery charging stations, except at battery manufacturing plants
- Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized
- Equipment used to mix and package, soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized
- Drop hammers or hydraulic presses for forging or metalworking
- Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment
- Vents from continuous emissions monitors and other analyzers
- Natural gas pressure regulator vents, excluding venting at oil and gas production facilities
- Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation
- Equipment used for surface coating, painting, dipping or spraying operations, except those that will emit VOC or HAP
- CO₂ lasers, used only on metals and other materials which do not emit HAP in the process
- Consumer use of paper trimmers/binders
- Drying ovens and autoclaves, electric or steam heated, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam
- Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants
- Laser trimmers using dust collection to prevent fugitive emissions
- Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents²
- Routine calibration and maintenance of laboratory equipment or other analytical instruments
- Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis
- Hydraulic and hydrostatic testing equipment
- Environmental chambers not using hazardous air pollutant (HAP) gases
- Shock chambers
- Humidity chambers
- Solar simulators
- Fugitive emissions related to movement of passenger vehicles, provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted

² Many lab fume hoods or vents might qualify for treatment as insignificant or be grouped together for purposes of description.

STATE OF NEVADA
TRIVIAL ACTIVITIES LIST

- Process water filtration systems and demineralizers
- Demineralized water tanks and demineralizer vents
- Boiler water treatment operations, not including cooling towers
- Oxygen scavenging (de-aeration) of water
- Ozone generators
- Fire suppression systems
- Emergency road flares
- Steam vents and safety relief valves
- Steam leaks
- Steam cleaning operations
- Steam sterilizers
- Oxygen plant, not including fuel burning equipment
- Lime slakers
- Ro-taps (bench scale)
- Riffles
- Ventilated benches (sample preparation area)
- Underground mining activities (including ventilation shafts)
- Aspirating devices for, and venting of, aerosol cans, butane or natural gas cylinders, propane gas cylinders and ether cylinders with a capacity of less than 1 gallon
- Vacuum truck related activities
- Non-commercial experimental and analytical laboratory equipment which are bench scale in nature
- Use of pesticides, fumigants and herbicides
- Equipment using water, soap, detergents, or a suspension of abrasives in water for purposes of cleaning or finishing
- Pump or motor oil reservoirs
- Electric motors
- Soil gas sampling
- Continuous emissions monitoring system calibration gases
- Water treatment or storage or cooling systems for process water (specify any water additives), not including cooling towers
- Chemical storage associated with water and wastewater treatment
- Aerosol can usage
- Plastic pipe and liner welding
- Acetylene, butane and propane torches
- Equipment used exclusively for portable steam cleaning
- Caulking operations which are not part of a production process
- High voltage induced corona
- Production of hot/chilled water for on-site use not related to an industrial process
- Filter draining
- General vehicle maintenance and servicing activities at the source
- Station transformers
- Circuit breakers (non-PCB oil filled)

STATE OF NEVADA
TRIVIAL ACTIVITIES LIST

- Storage cabinets for flammable products
- Fugitive emissions from landfill operations (provided the landfill is not subject to any federal applicable requirement)
- Automotive repair shop activities
- Stormwater ponds
- Blast cleaning equipment using a suspension of abrasive in water and any exhaust system or collector serving them exclusively
- Motor vehicle wash areas, etc.
- Open burning (provided all reporting and permitting requirements which apply are followed)
- Fire fighting activities and training conducted at the source in preparation for fighting fires
- Open burning activities in accordance with the NAC
- Flares used to indicate danger
- Pressure relief valves
- Natural gas pressure regulator vents, excluding venting at oil and gas production facilities

ATTACHMENT 4

LIST OF HAZARDOUS AIR POLLUTANTS

The original list of hazardous air pollutants as follows:

CAS Number	Chemical Name
75070	Acetaldehyde
60355	Acetamide
75058	Acetonitrile
98862	Acetophenone
53963	2-Acetylaminofluorene
107028	Acrolein
79061	Acrylamide
79107	Acrylic acid
107131	Acrylonitrile
107051	Allyl chloride
92671	4-Aminobiphenyl
62533	Aniline
90040	o-Anisidine
1332214	Asbestos
71432	Benzene (including benzene from gasoline)
92875	Benzidine
98077	Benzotrichloride
100447	Benzyl chloride
92524	Biphenyl
117817	Bis(2-ethylhexyl)phthalate (DEHP)
542881	Bis(chloromethyl)ether
75252	Bromoform
106990	1,3-Butadiene
156627	Calcium cyanamide
105602	Caprolactam (See Modification)
133062	Captan
63252	Carbaryl
75150	Carbon disulfide
56235	Carbon tetrachloride
463581	Carbonyl sulfide
120809	Catechol
133904	Chloramben
57749	Chlordane
7782505	Chlorine
79118	Chloroacetic acid
532274	2-Chloroacetophenone
108907	Chlorobenzene
510156	Chlorobenzilate
67663	Chloroform
107302	Chloromethyl methyl ether
126998	Chloroprene
1319773	Cresols/Cresylic acid (isomers and mixture)
95487	o-Cresol
108394	m-Cresol
106445	p-Cresol
98828	Cumene
94757	2,4-D, salts and esters
3547044	DDE (See technical note)
334883	Diazomethane
132649	Dibenzofurans (See technical note)
96128	1,2-Dibromo-3-chloropropane

84742	Dibutylphthalate
106467	1,4-Dichlorobenzene(p)
91941	3,3-Dichlorobenzidene(See technical note)
111444	Dichloroethyl ether (Bis(2-chloroethyl)ether)
542756	1,3-Dichloropropene
62737	Dichlorvos
111422	Diethanolamine
121697	N,N-Diethyl aniline (N,N-Dimethylaniline)(See technical note)
64675	Diethyl sulfate
119904	3,3-Dimethoxybenzidine(See technical note)
60117	Dimethyl aminoazobenzene
119937	3,3'-Dimethyl benzidine(See technical note)
79447	Dimethyl carbamoyl chloride(See technical note)
68122	Dimethyl formamide
57147	1,1-Dimethyl hydrazine(See technical note)
131113	Dimethyl phthalate
77781	Dimethyl sulfate
534521	4,6-Dinitro-o-cresol, and salts
51285	2,4-Dinitrophenol
121142	2,4-Dinitrotoluene
123911	1,4-Dioxane (1,4-Diethyleneoxide)
122667	1,2-Diphenylhydrazine
106898	Epichlorohydrin (1-Chloro-2,3-epoxypropane)
106887	1,2-Epoxybutane
140885	Ethyl acrylate
100414	Ethyl benzene(See technical note)
51796	Ethyl carbamate (Urethane)
75003	Ethyl chloride (Chloroethane)
106934	Ethylene dibromide (Dibromoethane)
107062	Ethylene dichloride (1,2-Dichloroethane)
107211	Ethylene glycol
151564	Ethylene imine (Aziridine)
75218	Ethylene oxide
96457	Ethylene thiourea
75343	Ethylidene dichloride (1,1-Dichloroethane)
50000	Formaldehyde
76448	Heptachlor
118741	Hexachlorobenzene
87683	Hexachlorobutadiene
77474	Hexachlorocyclopentadiene
67721	Hexachloroethane
822060	Hexamethylene-1,6-diisocyanate
680319	Hexamethylphosphoramide
110543	Hexane
302012	Hydrazine
7647010	Hydrochloric acid(See technical note)
7664393	Hydrogen fluoride (Hydrofluoric acid)
7783064	Hydrogen sulfide(See Modification)
123319	Hydroquinone
78591	Isophorone
58899	Lindane (all isomers)
108316	Maleic anhydride
67561	Methanol
72435	Methoxychlor

74839	Methyl bromide (Bromomethane)
74873	Methyl chloride (Chloromethane)
71556	Methyl chloroform (1,1,1-Trichloroethane)
78933	Methyl ethyl ketone (2-Butanone)
60344	Methyl hydrazine
74884	Methyl iodide (Iodomethane)
108101	Methyl isobutyl ketone (Hexone)
624839	Methyl isocyanate
80626	Methyl methacrylate
1634044	Methyl tert butyl ether(See technical note)
101144	4,4-Methylene bis(2-chloroaniline)(See technical note)
75092	Methylene chloride (Dichloromethane)
101688	Methylene diphenyl diisocyanate (MDI)
101779	4,4'-Methylenedianiline
91203	Naphthalene
98953	Nitrobenzene
92933	4-Nitrobiphenyl
100027	4-Nitrophenol
79469	2-Nitropropane
684935	N-Nitroso-N-methylurea
62759	N-Nitrosodimethylamine
59892	N-Nitrosomorpholine
56382	Parathion
82688	Pentachloronitrobenzene (Quintobenzene)
87865	Pentachlorophenol
108952	Phenol
106503	p-Phenylenediamine
75445	Phosgene
7803512	Phosphine
7723140	Phosphorus(See technical note)
85449	Phthalic anhydride
1336363	Polychlorinated biphenyls (Aroclors)
1120714	1,3-Propane sultone
57578	beta-Propiolactone
123386	Propionaldehyde
114261	Propoxur (Baygon)
78875	Propylene dichloride (1,2-Dichloropropane)
75569	Propylene oxide
75558	1,2-Propylenimine (2-Methyl aziridine)
91225	Quinoline
106514	Quinone
100425	Styrene
96093	Styrene oxide
1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin
79345	1,1,2,2-Tetrachloroethane
127184	Tetrachloroethylene (Perchloroethylene)
7550450	Titanium tetrachloride
108883	Toluene
95807	2,4-Toluene diamine
584849	2,4-Toluene diisocyanate
95534	o-Toluidine
8001352	Toxaphene (chlorinated camphene)
120821	1,2,4-Trichlorobenzene
79005	1,1,2-Trichloroethane

79016	Trichloroethylene
95954	2,4,5-Trichlorophenol
88062	2,4,6-Trichlorophenol
121448	Triethylamine
1582098	Trifluralin
540841	2,2,4-Trimethylpentane
108054	Vinyl acetate
593602	Vinyl bromide
75014	Vinyl chloride
75354	Vinylidene chloride (1,1-Dichloroethylene)
1330207	Xylenes (isomers and mixture)
95476	o-Xylenes (See technical note)
108383	m-Xylenes (See technical note)
10642	p-Xylenes (See technical note)
	Antimony Compounds
	Arsenic Compounds (inorganic including arsine)
	Beryllium Compounds
	Cadmium Compounds
	Chromium Compounds
	Cobalt Compounds
	Coke Oven Emissions
	Cyanide Compounds ¹
	Glycol ethers ²
	Lead Compounds
	Manganese Compounds
	Mercury Compounds
	Fine mineral fibers ³ (See technical note)
	Nickel Compounds
	Polycyclic Organic Matter ⁴ (See technical note)
	Radionuclides (including radon) ⁵
	Selenium Compounds

NOTE: For all listings above which contain the word "compounds" and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (i.e., antimony, arsenic, etc.) as part of that chemical's infrastructure.

¹ X'CN where X = H' or any other group where a formal dissociation may occur. For example KCN or Ca(CN)₂

² Includes mono- and di- ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-(OCH₂CH₂)_n-OR' where

n = 1, 2, or 3

R = alkyl or aryl groups

R' = R, H, or groups which, when removed, yield glycol ethers with the structure: R-(OCH₂CH)_n-OH. Polymers are excluded from the glycol category. (See Modification)

³ Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.

⁴ Includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100 ½ C.

⁵ A type of atom which spontaneously undergoes radioactive decay.

Modifications To The 112(b)1 Hazardous Air Pollutants

Authority for modifications:

Section 112 of the Act contains a mandate for U.S. EPA to evaluate and control emissions of hazardous air pollutants. Section 112(b)(1) includes an initial list of hazardous air pollutants that is composed of specific chemical compounds and compound classes to be used to identify source categories for which the U.S. EPA will promulgate emissions standards. The listed categories are subject to emission standards subsequently developed under Section 112. The U.S. EPA must periodically review the list of hazardous air pollutants and, where appropriate, revise this list by rule. In addition, any person may petition U.S. EPA under Section 112(b)(3) to modify the list by adding or deleting one or more substances. A petitioner seeking to delete a substance must demonstrate that there are adequate data on the health and environmental effects of the substance to determine that emissions, ambient concentrations, bioaccumulation, or deposition of the substance may not reasonably be anticipated to cause any adverse effects to human health or the environment. To demonstrate the burden of proof, a petitioner must provide a detailed evaluation of the available data concerning the substance's potential adverse health and environmental effects, and estimate the potential exposures through inhalation or other routes resulting from emissions of the substance.

Modifications

Glycol Ethers - Proposed

On January 12, 1999 (FR64:1780), U.S. EPA proposed to modify the definition of glycol ethers to exclude surfactant alcohol ethoxylates and their derivatives (SAED). This proposal was based on U.S. EPA's finding that emissions, ambient concentrations, bioaccumulation, or deposition of SAED may not reasonably be anticipated to cause adverse human health or environmental effects. U.S. EPA also proposed to make conforming changes in the definition of glycol ethers with respect to the designation of hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The proposal reads as follows:

"The definition of the glycol ethers category of hazardous air pollutants, as established by 42 U.S.C. 7412(b)(1) includes mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol $R-(OCH_2CH_2)_n-OR'$ Where: $n=1, 2, \text{ or } 3$ $R=$ alkyl C7 or less, or phenyl or alkyl substituted phenyl $R'=H$, or alkyl C7 or less, or carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate."

Notices of Review

Date	Citation	Description
06/23/99	64 FR 33453	Notice:Hazardous Air Pollutant list-Methyl Ethyl Ketone(MEK); receipt of a complete petition to delist

Caprolactam

On July 19, 1993, U.S. EPA received a petition from AlliedSignal, Inc., BASF Corporation, and DSM Chemicals North America, Inc. to delete caprolactam (CAS No. 105-60-2) from the hazardous air pollutant list in Section 112(b)(1), 42 U.S.C., Section 7412(b)(1). A Notice of Receipt was published (58FR45081, August 26, 1993) noting that the data filed were adequate to support decision making. After a comprehensive review of the data submitted, the EPA published a proposal to delist caprolactam (60FR48081, September 18, 1995). In order to help address public concern, on March 13, 1995, U.S. EPA executed two detailed agreements with AlliedSignal concerning the Irmo, South Carolina manufacturing facility and another facility located in Chesterfield, Virginia, copies of which are included in the public docket for this rulemaking. AlliedSignal agreed that, if caprolactam was delisted pursuant to the proposal, AlliedSignal would install emissions controls which EPA believed would be equivalent to the controls which would have been required had EPA issued a standard to control these sources under Section 112. The agreed emissions controls are incorporated in federally enforceable operating permits for the affected facilities, and will be in place years earlier than controls would have otherwise been required. In addition,

AlliedSignal has agreed to establish a citizen advisory panel concerning the Irmo facility in order to improve communications with the community and to assure that citizens have an ongoing role in implementation of the agreed emission reductions. The public requesting a public hearing. On November 28, 1995, the EPA published a notice of public hearing and an extension of the comment period (60FR58589). After considering all public comments, the EPA published a final rule delisting caprolactam (61FR30816, June 18, 1996).

All information associated with this rule making is located in Docket Number A-94-33 at the Central Docket Section (A-130), Environmental Protection Agency, 401 M St. SW., Washington, D.C. 20460. phone 202-260-7548, fax 202-260-4400, email a-and-r-docket@epamail.epa.gov. The docket includes complete index to all papers filed in this docket, a copy of the original petition, comments submitted, and additional materials supporting the rule. A reasonable fee may be charged for copying. The docket may be inspected in person between 8:00 a.m. and 4:30 p.m. on weekdays at EPA's Central Docket Section, West Tower Lobby, Gallery 1, Waterside Mall, 401 M St., SW, Washington, D.C. 20460.

Hydrogen Sulfide

A clerical error led to the inadvertent addition of hydrogen sulfide to the Section 112(b) list of Hazardous Air Pollutants. However, a Joint Resolution to remove hydrogen sulfide from the Section 112(b)(1) list was passed by the Senate on August 1, 1991 (Congressional Record page S11799), and the House of Representatives on November 25, 1991 (Congressional Record pages H11217-H11219). The Joint Resolution was approved by the President on December 4, 1991. Hydrogen Sulfide is included in Section 112(r) and is subject to the accidental release provisions. A study (see below) was required under Section 112(n)(5).

Hydrogen Sulfide Air Emissions Associated with the Extraction of Oil and Natural Gas,
EPA-453/R-93-045,

NTIS (publication # is PB94-131224, \$36.50 hard copy, \$17.50 microfiche).

National Technical Information Services (NTIS)
5285 Port Royal Road
Springfield, VA 22161
703-487-4650 800-426-4791
703-487-4807 8:30-5:30 EST M-F

ATTACHMENT 5

LIST OF DEFAULT CONTROL EFFICIENCY RATINGS

Nevada Bureau of Air Pollution Control
Emission Control Technology - Control Efficiency Ratings

Emission Control Technology	Control Efficiency Rating
Water Sprays	75%
Fogging Water Sprays	85%
Fogging Water Sprays with Surfactant	90%
Pneumatic Fogging Water Sprays	95%
Cyclones	*80%
High-Efficiency Cyclones	*96%
Multi Clones	*95%
Wet Scrubber	*85%
Venturi Scrubber	*95%
High-Efficiency Wet Scrubber	*98%
Electrostatic Precipitator	*Manufacturers Guarantee
Enclosure	50%
Filter Vent (cartridge or filter sock)	*90%
Baghouse/Dust Collector	*Manufacturers Guarantee/0.02 grains/dscf

Note: - The guaranteed emissions outlet (outlet grain loading) information from the pollution control device manufacturer should be utilized to derive appropriate emissions limitations rather than the percent reduction ratings provided above. The percent reduction rating provided by the pollution control device manufacturer is based on the difference between the amount of pollutant entering the control versus the amount of pollutant exiting the control. If the percent reduction rating provided above is applied to emission factors (such as those provided in AP-42) that are different from those used by the pollution control device manufacturer in the design of the control, excessively low, and in many cases un-achievable emissions levels may be calculated.